

Dana M. Reuter

Earth Sciences Department
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Education

- 2021 Ph.D., University of Oregon, Eugene, Oregon, Department of Earth Sciences
Trophic structure evolution in Oregon Oligo-Miocene terrestrial communities
Advisor: Samantha Hopkins.
- 2015 B.A., Mount Holyoke College, South Hadley, Massachusetts, Geology, Biology Honors
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Current Institutional Affiliations

University of Oregon, Department of Earth Sciences
Texas A&M University, Department of Ecology and Conservation Biology
Florida Museum of Natural History

Professional Experience

- 2022-current Biology Postdoctoral Research Fellow, National Science Foundation
Sponsoring scientists: Robert Guralnick, Ph.D., University of Florida; Michelle Lawing, Ph.D., Texas A&M University
- 2022 Pro-Tem Faculty, University of Oregon, Earth Sciences Department
- 2022 Associate Editor, *The Bulletin of the Museum of Natural and Cultural History*
- 2021-2022 Neotoma Database Research Scientist
<https://www.neotomadb.org/>
- 2015-2021 Graduate Teaching Fellow, University of Oregon, Earth Sciences Department
- 2019 Script Writer, Eons, PBS Digital Studios
- 2019 Instructor, Sternberg Museum of Natural History, Kansas
- 2016-2019 Graduate Research Fellow: *Earth Life Consortium*, Supervisor: Edward Davis, Ph.D.
- 2016, 2018 Condon Collections Fellow, University of Oregon, Museum of Natural and Cultural History
- 2017 Geoscientists-in-the-Parks Guest Scientist, John Day Fossil Beds National Monument
- 2014 The Field Museum of Natural History: Research Experiences for Undergraduates (REU), *Morphological evolution of carnivoran milk teeth*, Advisers: Susumu Tomiya, Ph.D., Kenneth Angielczyk, Ph.D.
<http://www.fieldmuseum.org/morphological-evolution-carnivoran-milk-teeth>
- 2012, 2014 Teaching Assistant, Mount Holyoke College, Geology Department
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Awards

- 2022-2024 National Science Foundation Biology Postdoctoral Research Fellow, \$138,000
2016, 2017, 2019, 2020 Baldwin Scholarship, University of Oregon Department of Earth Sciences, \$4,640
2020 Outstanding TA, University of Oregon Department of Earth Sciences, \$750
2020 Geological Society of America research grant \$1,365
2019 IsoCamp participant support fund \$750
2017 Department of Earth Sciences Good Citizen Award, University of Oregon, \$1,000
2017 Jackson School of Geosciences Student Travel Grant, Society of Vertebrate Paleontology, \$400
2014 Research Experience for Undergraduates, National Science Foundation, \$6,250
2013 Mount Holyoke College Lynk Universal Funding, Science Center Fund, \$5,000
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Publications

Published

Reuter, D.M., S.S.B. Hopkins and S.A. Price. 2023. What is a mammalian omnivore? Insights into terrestrial mammalian diet diversity, body mass and evolution. *Proc. R. Soc. B.* 2902022106220221062
<http://doi.org/10.1098/rspb.2022.1062>

Balk, M.A., Deck, J., Emery, K.F., Walls, R.L., **Reuter, D.**, LaFrance, R., Arroyo-Cabrales, J., Barrett, P., Blois, J., Boileau, A., Brenskelle, L., Cannarozzi, N.R., Cruz, J.A., Dávalos, L.M., de la Sancha, N.U., Gyawali, P., Hantak, M.M., Hopkins, S., Kohli, B., King, J.N., Koo, M.S., Lawing, A.M., Machado, H., McCrane, S.M., McLean, B., Morgan, M.E., Pilaar Birch, S., Reed, D., Reitz, E.J., Sewnath, N., Upham, N.S., Villaseñor, A., Yohe, L., Davis, E.B., Guralnick, R.P., A solution to the challenges of interdisciplinary aggregation and use of specimen-level trait data, *ISCIENCE* (2022), doi: <https://doi.org/10.1016/j.isci.2022.105101>.

Reuter, D.M., S.S.B. Hopkins, E.B. Davis. 2021. Carnivoran intraspecific tooth-size variation shows heterogeneity along the tooth row and among species. *Journal of Mammalogy*, 102(1), 236-249
FuTRES contribution #17.
<https://doi.org/10.1093/jmammal/gyaa157>

Barrett, P.Z., L. Finkelman, G. Perdue, W.N.F. McLaughlin, **D.M. Reuter**, S.S.B. Hopkins. 2019. Small Carnivoran fauna of the Mascall Formation, Crooked River Basin, Central Oregon. *Journal of Vertebrate Paleontology*, 39(5), e1717506. <https://doi.org/10.1080/02724634.2019.1717506>

In Preparation

Reuter, D.M., J. Wainwright, S. Blumenthal, S.S.B. Hopkins, Oregon Oligo-Miocene herbivore community niche partitioning: insights from stable isotope analysis.

Reuter, D.M., S.S.B. Hopkins, E.B. Davis. Oregon Oligo-Miocene trophic diversity and community structure. *Palaeogeography, palaeoclimatology, palaeoecology*.

Invited Workshop Participant

2023	RCN Workshop and Panel Discussion: Mammal diversification in relation to dynamic landscapes, Museum of Natural and Cultural History
2019-2021	FuTRES, Functional Trait Resource for Environmental Studies, https://futres.org/
2019	IsoCamp, Stable Isotope Biogeochemistry and Ecology, Salt Lake City, Utah

Student Mentorship

2023	Aggie Research STEM Research Leadership, Texas A&M University. Eight undergraduate students, Project title: Are you what you eat? Investigating the influence of diet on mammalian ecology and evolution. https://aggiresearch.tamu.edu/spring-2023-are-you-what-you-eat-investigating-the-influence-of-diet-on-mammalian-ecology-and-evolution/
2021-2022	Rachel Lisle, Honors Thesis: Late Cretaceous shark biogeography
2019-2020	Eleanor Froehlich, Undergraduate Research Symposium: Camelidae of Oregon
2018-2020	Megan Wyatt, Honors Thesis: Using geometric morphometrics to distinguish <i>Chaetodipus</i> and <i>Perognathus</i> dentition (Rodentia, Heteromyidae) rodents. Currently a graduate student at Stony Brook University.
2017-2018	Dylan Carlini, Honors Thesis: Evolution of the mammalian body mass communities in the Miocene of Oregon. Currently a graduate student at the University of Arizona.

Teaching Experience

Lead Instructor

2022	ERTH 203 <i>History of Life</i> , University of Oregon, Earth Sciences Department
2021	ERTH 406/606 <i>Field Studies in Tectonics & Paleontology, Section 1(A) stratigraphy/sedimentology/paleontology</i> , University of Oregon, Earth Sciences Department
2019	Introduction to Research Summer Short Course, Sternberg Museum of Natural History, Kansas

Co-Designed

2020	GEOL 410/510 <i>Paleoecology and Functional Morphology</i> , University of Oregon, Earth Sciences Department
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Teaching Fellowship

2017, 19, 21	GEOL 418/518 <i>Earth and Environmental Data Analysis</i> , University of Oregon, Earth Sciences Department
2020	GEOL 450 <i>Geocommunication</i> , University of Oregon, Earth Sciences Department
2019	GEOL 203 <i>History of life</i> , University of Oregon, Earth Sciences Department

- 2018 GEOL 406 *Field Studies in Paleontology & Structure*, University of Oregon, Earth Sciences Department
- 2017 GEOL 434/534 *Vertebrate Paleontology*, University of Oregon, Earth Sciences Department
- 2016 HC 441 *Geology in the Field*, University of Oregon, Clark Honors College
- 2015 GEOL 431/531 *Invertebrate Paleontology*, University of Oregon, Earth Sciences Department – gave two independent lectures
- 2014 GEOL 100 *Physical Geology*, Mount Holyoke College, Department of Geology
- 2012 GEOL 101 *Environmental Geology*, Mount Holyoke College, Department of Geology

Science Literacy Program Scientific Teaching Graduate Fellow

- 2018 GEOL 103 *Evolving Earth*, University of Oregon, Earth Sciences Department – gave two independent lectures
- Vandegrift, EVH, Barber, NC, Vitale, A & Ward, T. (2020). Supporting Science Graduate Teaching Assistants and Undergraduate Learning Assistants' Teaching Professional Development. *Transformative Dialogues: Teaching and Learning Journal*. 13(3).
<https://journals.kpu.ca/index.php/td/article/view/431/963>

Training Workshops Attended

- 2018 Mobile Summer Institute on Scientific Teaching – named a *Scientific Teaching Fellow*
- 2016-2020 University of Oregon Science Literacy Program Teaching Journal Club
- 2016 Society of Vertebrate Paleontology Teaching Workshop, *Filling the Expectation Gap: Paleontologists as Teaching Professors- Professional Development for Paleontologists Working Outside of Research-intensive Universities*

Service and Outreach

- 2020-22 Neotoma Leadership Council, Early Career Researcher
- 2020-21 GEODES (Geoscientists Encouraging Openness and Diversity in the Earth Sciences), Department of Earth Sciences Diversity Committee Fieldwork Subcommittee
- 2017-19 GEODES (Geoscientists Encouraging Openness and Diversity in the Earth Sciences), Department of Earth Sciences Diversity Committee – Drafted the 2019 Diversity Action Plan that was sent to the College of Arts and Sciences
- 2019 *Field Work Readiness*, IgDEAS Initiative (Inclusivity and Gender Diversity in Earth and Atmospheric Sciences)
- 2019 University of Oregon Women in Graduate Sciences Executive Officer
Generations Luncheon, Speaker: Barbara McManus, Director for R&D for HP, Inc.
Oakshire Inspires, *Women in Stem Night*, Oakshire Brewing, Eugene Oregon
- 2018 Society of Vertebrate Paleontology Student & Post-Doctoral Committee
- 2018 *Mammalian Skulls*, AVID (Advancement Via Individual Determination), Eugene, Oregon

- 2017-18 University of Oregon Women in Graduate Science Outreach Co-chair
Community Science Slam, Claim 52, Eugene Oregon
Summer Academy to Inspire Learning, Chemistry Camp, University of Oregon
Ophelia's Place STEAM Workshop, Ophelia's Place, Eugene Oregon
Meet a Scientist Day, Eugene Science Center
Astronomy, Speaker: NASA Astronaut Wendy Lawrence, Eugene Science Center
GIRLS' Science Adventure Days, University of Oregon, Eugene Science Center
Undergraduate Career and Research Forum, University of Oregon
- 2014 *Rocks and Minerals for the 6th Grade*, St. Bernadette School, Northborough, Massachusetts
- 2014 *Pursuing a Career or Internship in the Sciences*, High School Interns, Brookfield Zoo, Brookfield, Illinois
- 2014 *Meet a Scientist Day*, the Field Museum of Natural History, Chicago, Illinois

Field Experience

- 2019 Nayrn Basin, Paleontology & Structure, Kyrgyzstan- Funded by the U.S. Embassy of the Kyrgyz Republic
- 2018,2021 University of Oregon Paleontology Field Course, Oregon
- 2017 John Day Fossil Beds National Monument, Oregon
- 2016 University of Oregon Clark Honors College, *Geology in the Field*, Graduate Employee
- 2014 Mount Holyoke College Field Course, Death Valley
- 2013 *Geological Sampling in the Central Metasedimentary Belt and the Central Gneiss Belt of the Grenville Province, Canada*, Michelle Markley, Ph.D., Steve Dunn, Ph.D., Field Assistant
- 2013 *Holocene and Modern Climate Change in the High Arctic, Svalbard, Norway* Alan Werner, Ph.D., Field Assistant

Published Conference Abstracts

Reuter, Dana M., 2021. Unpacking mammalian omnivore macroecology and macroevolution with applications to the fossil record. *Romer Prize Session, Society of Vertebrate Paleontology Annual Meeting, virtual.*

Reuter, Dana M., Hopkins, Samantha S.B., Davis, Edward B. 2020. Beyond missing browsers: Oligo-Miocene community structure and functional diversity in the Northwest. *Society of Vertebrate Paleontology Annual Meeting, virtual.*

- Reuter, Dana M.,** Hopkins, Samantha S.B., Davis, Edward B. 2019. Quantifying intraspecific carnivoran tooth variation. *Western Association of Vertebrate Paleontology*, Eugene, Oregon.
- Reuter, Dana M.,** Hopkins, Samantha S.B., Price, Samantha A. 2018. What is a mammalian omnivore? Insights into omnivore diet diversity, body mass, and evolution. *Society of Vertebrate Paleontology Annual Meeting*, Albuquerque, New Mexico.
- Reuter, Dana M.,** Hopkins, Samantha S.B., Price, Samantha A. 2018. Body size implications of the dietary ecology of mammalian omnivores. *Evo-WIBO*, Townsend, Washington.
- Carlini, Dylan V., **Reuter, Dana M.,** Hopkins, Samantha S.B. 2018. Mammalian body mass communities in the Miocene of Oregon. *Geological Society of America Annual Meeting*, Indianapolis, Indiana.
- Reuter, Dana M.,** Hopkins, Samantha S.B., Famoso, Nicholas A., Davis, Edward Byrd. 2017. Mammalian community structure through time: Oregon Miocene community change. *Geological Society of America Annual Meeting*, Seattle, WA.
- Reuter, Dana M.,** Hopkins, Samantha S.B., Famoso, Nicholas A. 2017. Mammalian community structure through time: Oregon Miocene community change in response to spreading grasslands. *Society of Vertebrate Paleontology Annual Meeting*, Calgary, Canada.
- Reuter, Dana M.,** Hopkins, Samantha S.B. 2016. Quantifying intraspecific variation across the tooth row in Carnivorans (Mammalia, Carnivora). *Society of Vertebrate Paleontology Annual Meeting*, Salt Lake City, Utah.
- Hopkins, S. S., Davis, E. B., Theodor, J. M., Famoso, N. A., McLaughlin, W. N., **Reuter, D.,** Perdue, G., Oberg, D., Biedron, E., Walters, K. 2016. Application of quantitative biostratigraphic methods to the record of terrestrial vertebrates: can we gain new insights? *Society of Vertebrate Paleontology Annual Meeting*, Salt Lake City, Utah.
- Reuter, Dana M.,** Sulser, Ben R., Tomiya, Susumu. 2016. Morphological evolution of carnivoran milk teeth. *Evo-WIBO*, Townsend, Washington.
- Tomiya S, **Reuter D.M.,** Sulser R.B. 2016. Morphological integration of deciduous and permanent dentitions in carnivorans. Washington, DC.
- Reuter, Dana M.,** Sulser, Ben R., Tomiya, Susumu. 2016. Morphological evolution of carnivoran milk teeth. *Society of Integrative and Comparative Biology Annual Meeting*, Portland, Oregon.
- Reuter, Dana M.,** Sulser, Ben R., Tomiya, Susumu. 2014. Morphological evolution of carnivoran milk teeth. *Undergraduate Research Symposium, the Field Museum of Natural History*, Chicago, Illinois
- Reuter, Dana M.,** Werner, Alan. 2014. Interpretation of sedimentation events during the 2012/2013 season in a proglacial lake, Lake Linné, Svalbard, Norway. *Keck Geology Consortium Symposium*, Mount Holyoke College, South Hadley, Massachusetts.

Professional Memberships

- 2019-Present Sigma Xi
 2018-Present American Society of Naturalists

2017-Present Paleontological Society
2016-Present Society of Vertebrate Paleontology
2016-Present Geological Society of America